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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-----------------|---------------------------|-----------------------|------------------------|------------------|--|
| 10/634,431 | 08/05/2003 | Wolfgang Guba | 21152 | 8300 | |
| 151 | 7590 10/20/20 | 6 | EXAMINER | | |
| | IN-LA ROCHE IN | STOCKTON, LAURA LYNNE | | | |
| | AW DEPARTMENT LAND STREET | ART UNIT | PAPER NUMBER | | |
| NUTLEY, 1 | NJ 07110 | | 1626 | | |
| | | | DATE MAILED: 10/20/200 | 6 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

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|---|--|--|--|--|----------|--|--|--|
| | | Applicat | ion No. | Applicant(s) | | | | |
| | | 10/634,4 | 31 | GUBA ET AL. | | | | |
| | Office Action Summary | Examine | г | Art Unit | | | | |
| | | Laura L. | Stockton, Ph.D. | 1626 | | | | |
| Period fo | The MAILING DATE of this communi or Reply | cation appears on th | e cover sheet with the d | correspondence add | iress | | | |
| A SH THE - Exte after - If the - If NC - Failu Any | ORTENED STATUTORY PERIOD FO MAILING DATE OF THIS COMMUNIO nsions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this commit period for reply specified above is less than thirty (30 period for reply is specified above, the maximum star or to reply within the set or extended period for reply reply received by the Office later than three months af ed patent term adjustment. See 37 CFR 1.704(b). | CATION. of 37 CFR 1.136(a). In no e unication. or days, a reply within the sta tutory period will apply and will, by statute, cause the ap | vent, however, may a reply be tir stutory minimum of thirty (30) day vill expire SIX (6) MONTHS from plication to become ABANDONE | nely filed rs will be considered timely. the mailing date of this cor ED (35 U.S.C. § 133). | | | | |
| Status | | | | | | | | |
| 1) | Responsive to communication(s) filed | d on <i>September 29</i> . | 2006. | | | | | |
| · | This action is FINAL . 2b)⊠ This action is non-final. | | | | | | | |
| 3) | , | | | | | | | |
| | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | | |
| Dispositi | ion of Claims | | | | | | | |
| 5)□ 6)⊠ 7)⊠ | ✓ Claim(s) 1-16 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. ☐ Claim(s) is/are allowed. ✓ Claim(s) 1-7, 10, 11 and 13 is/are rejected. ✓ Claim(s) 8,9,12 and 14-16 is/are objected to. ☐ Claim(s) are subject to restriction and/or election requirement. | | | | | | | |
| Applicati | ion Papers | | | | | | | |
| • — | The specification is objected to by the | | \ abjected to by the | Evaminor | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | | | |
| | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | | | |
| Priority ι | ınder 35 U.S.C. § 119 | | | | | | | |
| a)l | Acknowledgment is made of a claim f All b) Some * c) None of: 1. Certified copies of the priority of 3. Copies of the certified copies of application from the Internation See the attached detailed Office action | documents have be documents have be of the priority docum nal Bureau (PCT Ru | en received. en received in Applicati ents have been receive le 17.2(a)). | ion No ed in this National S | Stage | | | |
| | | | | | | | | |
| Attachmen | | | | | | | | |
| | e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (P1 | ΓO-948) | 4) Interview Summary Paper No(s)/Mail D | | | | | |
| 3) Inform | mation Disclosure Statement(s) (PTO-1449 or F r No(s)/Mail Date | | 5) Notice of Informal F 6) Other: | | -152) | | | |

DETAILED ACTION

Claims 1-16 are pending in the application.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on September 29, 2006 has been entered.

Rejections made in the previous Office Action that do not appear below have been overcome. Therefore,

Art Unit: 1626

arguments pertaining to these rejections will not be addressed.

Claim Objections

Claim 4 is objected to because of the following informalities: in claim 4, "cyclohexyl" is misspelled.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

⁽b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Application/Control Number: 10/634,431 Art Unit: 1626

Claims 1-7, 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by:

- A) CA Registry No. 339023-15-3 (May 30, 2001 entry date in Registry file on STN);
- B) CA Registry No. 339023-11-9 (May 30, 2001 entry date in Registry file on STN);
- C) CA Registry No. 339023-05-1 (May 30, 2001 entry date in Registry file on STN);
- D) CA Registry No. 339023-03-9 (May 30, 2001 entry date in Registry file on STN);
- E) CA Registry No. 339022-94-5 (May 30, 2001 entry date in Registry file on STN);
- F) CA Registry No. 339022-92-3 (May 30, 2001 entry date in Registry file on STN);
- G) CA Registry No. 339022-32-1 (May 30, 2001 entry date in Registry file on STN); or
- H) CA Registry No. 339008-11-6 (May 30, 2001 entry date in Registry file on STN).

Art Unit: 1626

Each of the above CA Registry Numbers describes compounds embraced by the instant claimed invention. It is well within the skill of one skilled in the art to prepare each of the above compounds. For example, Lin et al. {Journal of Heterocyclic Chemistry, 16(7), pages 1377-1383, (1979) } teach a process of making 2aminothiazole compounds (see Scheme 2b in column 2 on page 1377). See further Compounds IVe, IVf and IVg in Table 1 on page 1379. Lin et al. also teach that a number of 2-amino-4-(or 5-) thiazolyl phenyl ketones possessed moderate activity against Mycobacterium tuberculosis H37Rv infection (page 1378, column 2, first full paragraph). Therefore, each of the compounds cited above by their CA Registry Number are enabled and each anticipate the instant claimed invention.

Response to Arguments

Applicant's arguments filed September 29, 2006 have been fully considered but they are not persuasive.

Page 6

Art Unit: 1626

Applicant argues that: (1) the CAS Registry entries do not enable Applicant's invention; (2) to be enabling, a prior art reference must enable one of ordinary skill in the art to practice the invention without undue experimentation; and (3) it is the Examiner's burden to make a prima facie showing that the public possessed Applicant's invention in order for a Section 102 rejection to be proper.

All of Applicant's arguments have been considered but have not been found persuasive. As stated above, it is well within the skill of one skilled in the art to prepare each of the above cited compounds. Lin et al. {Journal of Heterocyclic Chemistry, 16(7), pages 1377-1383, (1979)}, for example, teach a process of making 2-aminothiazole compounds (see Scheme 2b in column 2 on page 1377). Therefore, each of the compounds are enabled and was in the public's possession more than a year before the filing date of the instant claimed invention.

Art Unit: 1626

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 10, 11 and 13 are rejected under 35
U.S.C. 103(a) as being unpatentable over Lin et al.

{Journal of Heterocyclic Chemistry, 16(7), pages 13771383, (1979)}.

Determination of the scope and content of the prior art (MPEP \$2141.01)

Applicants claim thiazole compounds. Lin et al. teach thiazole compounds that are structurally similar to the instant claimed compounds. See formula (IV) in Lin et al., for example, the compounds in Table 1 on page 1379 and especially Compounds IVe, IVf and IVg.

Art Unit: 1626

Ascertainment of the difference between the prior art and the claims (MPEP \$2141.02)

The difference between the compounds of Lin et al. and the compounds instantly claimed is that of positional isomerism (see proviso in instant claim 1 and the para instead of meta position of the chloro group under the R_1 definition of Compound IVg of Lin et al.).

Finding of prima facie obviousness--rational and motivation (MPEP \$2142-2413)

Nothing unobvious is seen in substituting the known claimed isomer for the structurally similar isomer, as taught by Lin et al., since such structurally related compounds suggest one another and would be expected to share common properties absent a showing of unexpected results. *In re Norris*, 84 USPQ 458 (1950).

One skilled in the art would thus be motivated to prepare positional isomers of the compounds taught by Lin et al. to arrive at the instant claimed products with the expectation of obtaining additional beneficial

Art Unit: 1626

products which would have activity against

Mycobacterium tuberculosis H37Rv infection. The

instant claimed invention would have been suggested and
therefore, obvious to one skilled in the art.

Allowable Subject Matter

Claims 8, 9, 12 and 14-16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura L. Stockton whose telephone number is (571) 272-0710. The examiner can normally be reached on Monday-Friday from 6:15 am to 2:45 pm. If the examiner is out of the Office, the examiner's supervisor, Joseph McKane, can be reached on (571) 272-0699.

Art Unit: 1626

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

The Official fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Laura L. Stockton, Ph.D.

Patent Examiner

Art Unit 1626, Group 1620

Technology Center 1600

October 16, 2006